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ABSTRACT

The unit contains a teacher's guide, student reading materials, and data sheets about a variety of worldwide demographic and economic variables. Designed for students in junior high through college, its goals are to encourage students to analyze the causes and consequences of world population and economic trends, and to detect interrelationships among data. Behavioral objectives include locating data in tables, comparing data, calculating population doubling time, and deriving a set of criteria for determining social development. The teacher's guide contains procedural directions for guiding students through surveys and activities based on seven data sheets (which are included in the guide). The newsletter contains articles for supplementary reading. Content includes a review of various theories about population growth and rate calculation, and a description of current legislation by the U. S. government concerning population education programs. Also included is a 1977 World Population Data Sheet. Statistics from this poster help students complete unit activities. The poster presents data on 12 factors for 161 countries. Data include estimated population in 1977, birth rate, death rate, rate of national increase, infant mortality rate, life expectancy at birth, urban population, and per capita gross national product. (Author/AV)

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World Population and Beyond

A Teaching Strategy for Global Studies

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WORLD POPULATION AND BEYOND

by Leon E. Clark with Andrew J. Leighton

Grade Level

Junior High School through College

Time Needed

One to three hours, depending on materials used and proportion assigned as homework

Materials

One PRB World Population Data Sheet for each student

Copies of Data Sheet 1, 2, 3, and 4 for each student

Overhead transparencies (or student copies) of Data Sheet 5, 6, and 7

Goal

To encourage students to: examine worldwide data on a variety of demographic and economic variables; analyze the causes and consequences of world population and economic trends; detect the interrelationships among data; and develop the skills of reading tables and making demographic calculations.

Behavioral Objectives

By completing the Data Sheets in this module, students should be able to:

Locate specific data in a table;

Compare data from country to country, and region to region;

Detect patterns in the data;

Analyze the interrelationships among different variables;

Calculate population doubling times;

Create original mathematical formulas for determining rates of population growth and decline;

Synthesize information drawn from a variety of variables;

Derive a set of criteria for determining social development;

Assess the level of development of any given country based on these criteria.

Procedure

The following procedure is based on the use of all of the Data Sheets in the module. It is not necessary, of course, to use every Data Sheet. Each teacher should pick and choose, according to time available and course objectives.

1. Ask each student to complete Data Sheet 1, the "Glance at the Globe" questionnaire.
2. Hand out the PRB World Population Data Sheet and ask the students to check their answers. They should record the precise answers in the blanks with the wavy lines.
3. Hold a brief discussion of the questionnaire with the class. You might ask: "What data surprised you the most?" "How did you answer question 4?" "What criteria did you use?"

(Compared to growth rates around the world,* the U.S. is growing very slowly. However, when the number of people added each year is taken into consideration, the U.S. might be considered to be growing at a moderate rate.)

4. Ask students to form small groups of 3 to 5 members. Hand out Data Sheet 2, "Fertility and Growth," and ask: (1) each student to complete the handout individually; (2) each group to discuss its answers; and (3) the whole class to discuss their answers.

   (The formula for calculating the rate of natural increase is

   $$\frac{\text{birth rate - death rate}}{10}$$

   The same formula is used for both positive and negative increase. In the case of the latter, of course, the death rate will be larger than the birth rate. If students, on Data Sheet 2, item 5, write death rate - birth rate ÷ 10 as the formula for calculating negative increase, they are right, logically and practically speaking, but they should be alerted to the fact that a second formula is not needed and indeed is not used by demographers.)

5. Hand out Data Sheet 3, "Population and Development," and follow the same procedure as above in #4.

6. Hand out Data Sheet 4, "TIC-TAC-DATA," and, according to the instructions on page 1, conduct a class exercise for completing the matrix. Alternatively, have the students complete the exercise individually, or in small groups or pairs. A class discussion should follow.

7. Show Data Sheet 5, "World Population Growth," on an overhead projector, or hand out copies to the class, and ask:

   "Why does the annual increase continue to rise when the rate of growth declines?" (The base gets larger each year.)

   "At the 1978 rate of growth, how long will it take the earth to add the population of the U.S.?" (About 3 years)

8. Show Data Sheet 6, "Population and Wealth," and ask:

   "What strikes you about this graph?"

   "How does the population growth rate of the poor countries compare to that of the rich countries?" (Check with the World Population Data Sheet.)

   "How do you think a high population growth rate affects a country's economic growth rate? Why?" (In some cases, a high population growth rate can stimulate economic growth, but in most cases it simply adds more young, dependent people to the population and therefore makes economic growth all the more difficult.)

   "How do you think a high per person GNP affects population growth rates?" (Consult the World Population Data Sheet or the "TIC-TAC-DATA" matrix; in general the higher the GNP, the lower the population growth rates.)

   "How fast do you think the poor countries are growing economically, compared to the rich countries of the world?" (See the next Data Sheet, "World Wealth.")

*"Growth rate" used in the context of this module refers to natural increase only. The PRB World Population Data Sheet does not include migration figures; hence total growth for individual countries, which includes natural increase plus net migration, cannot be calculated.

9. Show Data Sheet 7, "World Wealth," and ask:

   "What does this graph suggest about the welfare of the earth's inhabitants?"

   "What percentage of the earth's population live in the poor countries?" (Refer back to Data Sheet 6, "World Population Growth.")

   "What does the current distribution of the earth's income suggest about population growth in the near future?"

   "What does rapid population growth in the poor countries suggest about the future economic growth of these countries?"

Alternative Procedure

1. Begin the module by completing Data Sheet 1 in class (steps 1, 2 and 3 in the Procedure above.)
2. Assign Data Sheets 2, 3 and 4 for homework.
3. Discuss Data Sheets 5, 6 and 7 in class.

Supplemental Activities

1. One key demographic variable not shown on the World Population Data Sheet is *migration*. Have students research the extent to which immigration and emigration influence the population size of their community, state, and the U.S. What are the causes and consequences of in- and out-migration? Have students examine some of the causes of illegal immigration and try to assess its consequences for the sending and receiving countries.
2. Provide students with a blank world map. Have them locate the ten countries with the largest populations and record their population size on the map. Next, have them locate the ten countries projected to have the largest populations in the year 2000. Record their populations on the map. Ask students to consider the reasons for any differences in the two lists.
3. Ask students to make a vertical bar graph showing population for 1978 and projections for the year 2000 for the seven world regions shown on the World Population Data Sheet.

   Note: Ask students to explain the difference between a *projection* and a *prediction*. (A projection is simply a figure based on certain assumptions, e.g., what the birth rates will be over time. It is not a prediction that this figure will actually materialize or that the birth rates will conform to the assumptions. A projection simply says, *if* birth rates are such and such, and death rates are so and so, *then* the rate of natural increase will produce this figure. A prediction would say, the birth rate and death rate will be such and such, and therefore the figure will materialize.)
4. Ask students to consider the significance of dependency in a population. "What does a large youth population imply?" "A large old population?" "What do you think of viewing the years from 15 to 64 as the productive segment?" "How would you say the productivity of young people (under 15) or old people (over 64) varies from culture to culture?"

ACKNOWLEDGEMENTS

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SOURCES FOR DATA SHEETS

Data Sheets 1, 2, 3, and 4 are original. The sources for the other Data Sheets are as follows:

5. 1978 World Population Data Sheet, Population Reference Bureau; United Nations Working Paper #55, "Selected World Demographic Indicators 1950-2000," United Nations Demographic Division, 1975.
6. 1978 World Population Data Sheet, *Ibid.*
7. *United Nations, 1976 Statistical Yearbook,* p. 689, table 191, "Estimates of total and per capita national income and national disposal income". New York: 1977.

A GLANCE AT THE GLOBE

Answer the following questions by underlining or filling in the correct answer. All figures are only rough approximations. Please do not write in the blanks indicated by wavy lines.

1. How many people do you think there are in the world?

   20 million 400 million 1 billion 4 billion 8 billion ~~~~~~~~~~~~~~~~

2. How do you think the following world regions compare in population size? Rank the regions by putting a *1* after the largest, a *2* after the next largest, and so forth.

   North America_____ Asia_____ Africa_____

   Latin America_____ Europe_____

3. How many people do you think there are in the United States?

   2 million 20 million 200 million 400 million 800 million ~~~~~~~~~~~~~~~~

4. What do you think is happening to the U.S. population?

   It is growing very fast_____ It is growing at a moderate rate_____

   It is growing very slowly_____ It is not growing at all_____

   It is losing population_____

5. What do you think are the three most populous countries in the world?

   1._____ 2._____ 3._____

   ~~~~~~~~~~~~~~~~~~~~~~~~ ~~~~~~~~~~~~~~~~~~~~~~~~ ~~~~~~~~~~~~~~~~~~~~~~~~

6. How long do you think people live on the average?

   In the world_____ In the U.S._____

7. What do you think are the 3 wealthiest countries in the world?

   1._____ 2._____ 3._____

   ~~~~~~~~~~~~~~~~~~~~~~~~ ~~~~~~~~~~~~~~~~~~~~~~~~ ~~~~~~~~~~~~~~~~~~~~~~~~

FERTILITY AND GROWTH

1. Look at the birth rate column on the World Population Data Sheet. What 3 *countries* have the highest birth rates?

   _____ _____ _____

   What have the lowest? _____ _____ _____

2. What continent has the highest birth rate? _____

   Which has the lowest? _____

3. Look at the world's birth rate. How much larger is it than the death rate? (Subtract the death rate from the birth rate.) _____

   How fast is the world's population growing? (See the "Rate of Natural Increase" column.) _____

   What connection do you see between the last 2 numbers you have written down? _____

   Create your own formula for calculating the growth rate of a population (the percentage of natural increase).

(A birth rate is the number of births in a year for every *1,000* people in the population; a death rate is the number of deaths for every *1,000* people. Since a *percentage* is based on *100*, you simply divide the difference between the birth rate and the death rate by 10, or move the decimal point one place to the left, to get the *percentage* of annual natural increase.)

(continued on back)

4. Without using the World Population Data Sheet, calculate how long it will take the world's population to double at its present rate of growth (1.7% in 1978). Simply complete the following operation (leave the percentage as a whole number).

$$\frac{70}{\%\text{ annual growth}} \qquad \text{or} \qquad \text{____}\overline{)70}$$

Now check your answer with the "Number of Years to Double Population" column on the Data Sheet.

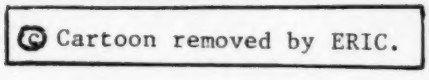
The Law of 70: The doubling time for any number that grows by a constant annual percentage—whether it be a population or a balance in a savings account—is calculated (approximately) by dividing the percentage of growth (interest) into 70.

Calculate the doubling times for the following rates of growth.

1%_____ 2%_____ 3.5%_____ 6%_____

5. Check the countries that are losing population (through negative natural increase). Write a formula for calculating a *negative* percentage of growth (through natural increase).

THE WIZARD OF ID **by Brant parker and Johnny hart**



THE WIZARD OF ID by permission of Johnny Hart and Field Enterprises, Inc.

POPULATION AND DEVELOPMENT

1. Without referring to any data, what country in the world would you say is the most highly developed?

   _____

   Why? What criteria have you used to make this judgment?

   _____

   _____

2. Based on information in the World Population Data Sheet, what country would you say is the most highly developed? _____

   What criteria have you used? _____

   _____

   What countries would you put in:

   2nd place _____; 3rd place _____

3. Which of the following items from the World Population Data Sheet would you say are related to development? (Put a check in the first space after each variable you think *is* related.)

Population	____	____	____	Infant Mortality Rate	____	____	____
Birth Rate	____	____	____	Population under 15	____	____	____
Death Rate	____	____	____	Population over 64	____	____	____
Rate of Natural Increase	____	____	____	Life Expectancy	____	____	____
				Urban Population	____	____	____
Number of Years to Double	____	____	____	Labor Force Projection	____	____	____
Population Projection to 2000	____	____	____	Per Capita GNP	____	____	____

   Rank the top 5 items you have checked by putting a *1* after the item you think is the most important indicator of development, a *2* after the item you think is next most important, and so forth.

4. Look at the column for "Per Capita Gross National Product" on the World Population Data Sheet. When per capita GNP is high, which items also tend to be high? Which items tend to be low?

   Go back to the list of items in question 3 and put an *H* next to the items that are high when per capita GNP is high, and an L next to items that are low when per capita GNP is high.

   Warning: Look for general trends in the world. Do not be misled by exceptional cases such as the oil producing nations of the Middle East.

TIC-TAC-DATA

A Matrix of Population and Development Variables

Instructions: The goal of this exercise is to fill in the empty squares of the matrix with either a plus sign (+), a minus sign (-), or a zero (0). The signs indicate the following.

\+ the intersecting variables are positively related; when one goes up, the other goes up; when one goes down, the other goes down.

\- the intersecting variables are negatively related; when one goes up, the other goes down.

0 the intersecting variables are not related or of questionable relationship.

Begin with the first variable on the top of the vertical column (Population Size) and move across the page to the right, filling in all the empty squares. Then move to the second variable in the vertical column (Birth Rate) and do the same thing. Follow this procedure until all of the squares are filled.

IF EVERY VARIABLE IN THE VERTICAL COLUMN IS USED, AS IN A JOINT CLASS PROJECT, THEN FILL IN ONLY THE WHITE BOXES ON THE BOTTOM HALF OF THE MATRIX.

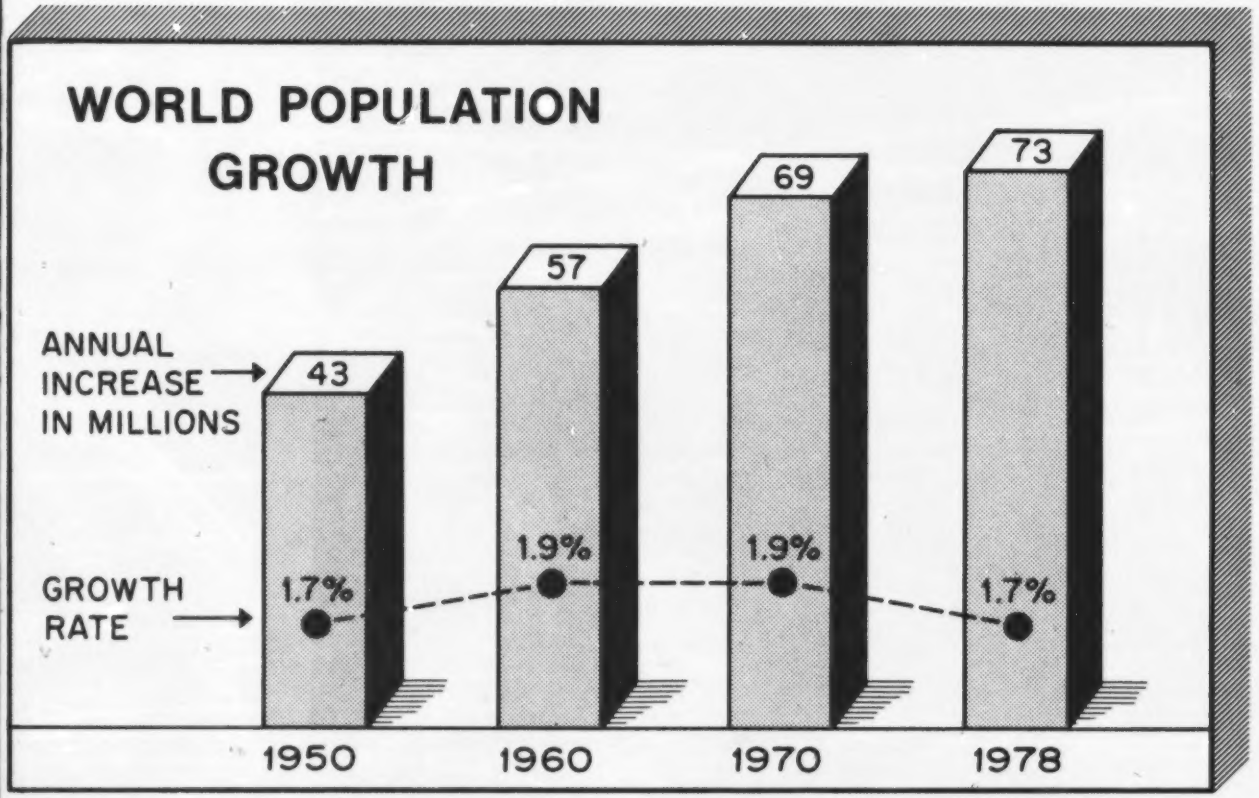
If, on the other hand, individuals or small groups take only one variable from the vertical column, then each groups should *fill in all the boxes* across the page, both the white and the grey. The groups should then meet for a general discussion.

The boxes for the last variable, "Per Capita Gross National Product," have been filled in as an example. Per capita GNP, by definition, is not related to the size of a population, so the first box has a zero. GNP, however, tends to be negatively related to birth rates (i.e., the higher the GNP, the lower the birth rates), so the second box has a minus sign. And finally, GNP tends to be positively related to level of urbanization (the higher the GNP, the higher the level of urbanization), so that box in the row has a plus sign.

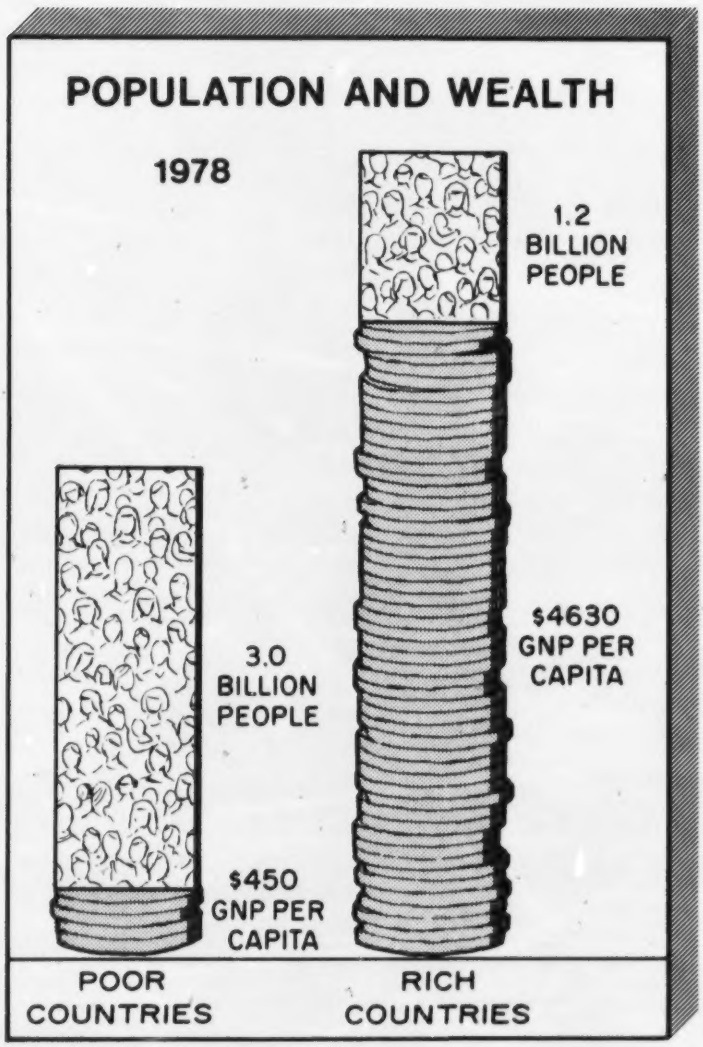
TIC-TAC-DATA

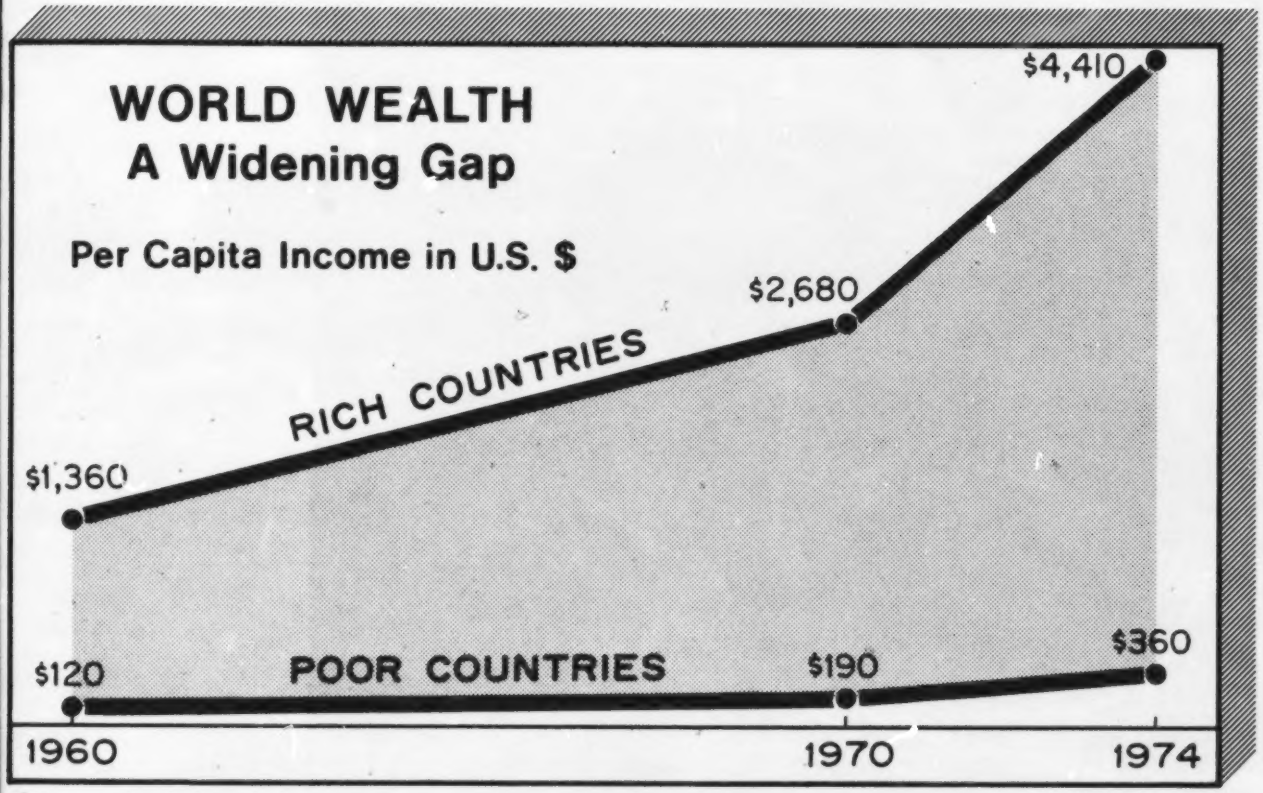
A Matrix of Population and Development Variables

	Population Size	Birth Rate	Death Rate	Rate of Natural Increase	Years to Double	Projection to 2000	Infant Mortality Rate	Population under 15 Years	Population over 64 Years	Life Expectancy	Urban Population	Projected Increase in Labor Force	Per Capita GNP
Population Size													
Birth Rate													
Death Rate													
Rate of Natural Increase (annual, percent)													
Number of Years to Double Population													
Population Projection to 2000 (millions)													
Infant Mortality Rate													
Population under 15 Years (percent)													
Population over 64 Years (percent)													
Life Expectancy at Birth (years)													
Urban Population (percent)													
Projected Increase in Labor Force, 1978-2000 (millions)													
Per Capita Gross National Product (US$)	O	—	—	—	—	O	—	—	+	+	+	O	


WORLD POPULATION GROWTH
ANNUAL INCREASE IN MILLIONS
GROWTH RATE
43
57
69
73
1.7%
1.9%
1.9%
1.7%
1950
1960
1970
1978

Data Sheet 6


POPULATION AND WEALTH
1978
1.2 BILLION PEOPLE
$4630 GNP PER CAPITA
3.0 BILLION PEOPLE
$450 GNP PER CAPITA
POOR COUNTRIES
RICH COUNTRIES


WORLD WEALTH
A Widening Gap
Per Capita Income in U.S. $
$4,410
$2,680
RICH COUNTRIES
$1,360
$120
POOR COUNTRIES
$190
$360
1960
1970
1974

inter-change

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While Gap Between Rich and Poor Widens

World Population: Growth on the Decline

The world's birth rate has dropped to an all-time low, and life expectancy has reached a new high, according to the 1978 PRB World Population Data Sheet.

The world birth rate now stands at 29 per 1,000, the first time it has ever dropped below 30. Life expectancy is 60 years on the average worldwide.

At the same time, world population growth continues its recent decline. It now stands at 1.7 percent, down from 1.8 percent in 1977 and 1.9 percent in 1970. At the present rate, however, world population size will double in the next 41 years.

A current "population snapshot" of the world would also show:

- a total world population of 4.2 billion;
- an annual addition of 73 million people;
- a wide economic gap between rich and poor countries.

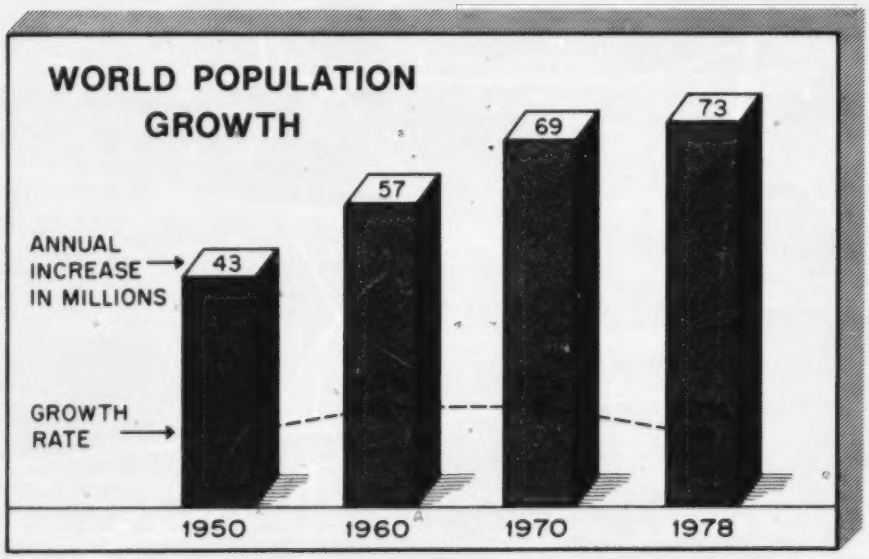
If changes over time are taken into consideration, then the snapshot would indicate:

- an ever widening economic gap between the rich and poor countries;
- a decline in death rates worldwide, especially in the poor countries;
- a continuing trend towards urbanization in the poor world;
- an increased acceptance of family planning as an inherent part of national development programs.

At current rates, the world adds the equivalent of a medium-sized city every day (200,000) and the combined populations of the United Kingdom, Norway, Ireland, Iceland, Finland and Denmark every year. During the 1970s more than 700 million people will be added to the earth, more than in any previous decade and a figure larger than the total world population in 1700.

Almost 90 percent of current growth is taking place in the poor countries of the world, those that can least afford the added strain on already fragile economies. At current population growth rates, most developing countries will have to double their economic output in the next 25 years just to stay even with population growth, let alone trying to improve living standards.

Almost all developing countries—representing three-fourths of the world's people—have natural increase rates (birth rate minus death rate) between 2 and 3 percent annually; many have rates as high as 3.5 percent. Libya had the highest rate in 1978, at 3.9 percent.



Source: Population Reference Bureau and United Nations

THE "LAW OF 70"

According to the "Law of 70," the doubling time for any number that grows at a constant annual percentage (exponentially) is calculated by dividing the percentage of growth into 70. Hence a population growing at 1 percent would double in size in 70 years; at 2 percent it would double in 35 years; at 3 percent, 23 years, and so forth.

The United States in 1978 has a natural increase rate of 0.6 percent. Its total growth rate including legal immigration is 0.8 percent, which, if continued, would double its population in 87 years. The last doubling, between 1921 and 1978, took just 57 years.

Since 1920, when the U.S. population became more urban than rural for the first time, the U.S. birth rate has been on a steady decline, with the exception of the post-World War II "baby boom" years. Fertility rates are almost universally lower in urban areas than in rural areas.

The somewhat popular misconception that the U.S. has achieved zero population growth (ZPG) derives from a confusion of replacement level fertility with zero growth. While it is true that American couples are now having fewer than 2 children on the average, 1.8 in 1977 to be exact (not quite enough to replace themselves), there are still approximately 1.4 million more births than deaths each year.

Because of the baby boom, the number of Americans now in the childbearing ages is disproportionately greater than the number in the older ages where most deaths occur. It may take two

generations (50 to 60 years) for these baby boomers to work themselves out of the age structure to the point where there are no more births than deaths, assuming that couples continue to have just two or fewer children on the average.

In other words, because of its relative youthfulness, the current U.S. population age structure has a built-in momentum for growth.

It is precisely this sort of momentum that makes the reduction of population growth so difficult to achieve, especially in developing countries. The faster a country is presently growing—that is, the more youthful its age structure and thus the greater the gap between births and deaths—the longer it will take that population to stabilize at ZPG, once fertility drops to replacement level.

A NEW TREND?

There is some evidence to suggest that the annual world population growth rate is no longer increasing and in fact may be beginning a gradual decline. After a steady increase since the end of World War II, reaching a high of 2.1 percent during the 1960s, the rate has recently declined to 1.7 percent, the 1950 level (see chart on p. 1).

Despite the decline in the *rate* of growth, however, the *number* of people added each year has actually increased because of an expanding base population. But even this number may be leveling off; projections for 1978 indicate an increase no higher than that of 1977, about 73 million.

Experts credit both family planning programs and social and economic development for the decline in birth rates in many countries of the world. As of 1978, only 7 percent of the developing world's population lived in countries that had no population policy or program whatever, compared to three times that figure only about a decade earlier.

At the same time, efforts to meet the basic human needs of the world's poor, largely through the delivery of social services and the redistribution of income, have had a dampening effect on birth rates, in the view of some observers.

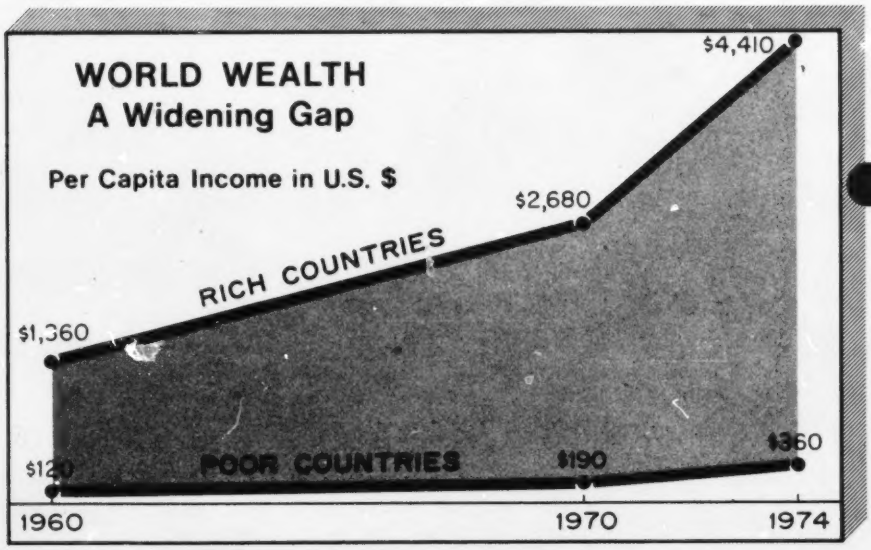
One school of thought argues that social and economic development is the main (but not sole) determinant of lowered fertility rates. The proponents of this position point to the successes of China, Cuba, South Korea, Taiwan, Singapore, Hong Kong and Sri Lanka as examples.

Another school of thought, the neo-Malthusian position, argues that economic development is not sufficient, or even necessary, to reduce birth rates. They point to the effectiveness of family planning programs in Indonesia and Colombia, implemented in the absence of deliberate income redistribution policies.

The most successful cases of fertility reduction, however, have involved a combination of both income redistribution and family planning programs, as in China, Taiwan, and South Korea. More and more experts are taking the position that both socio-economic change and family planning programs are desirable, if not indispensable, for long-term success.

PROGRESS, BUT . . .

Despite recent signs of hope that world population growth may be slowing, the uneven distribution of people and wealth worldwide only points to the need for greater reductions in fertility and redoubled efforts in development, not to mention the more difficult goal of distributing the world's wealth more equitably between the rich and poor nations.



Source: United Nations

As the chart below left shows, 3 billion people, or almost 75 percent of humanity, have an average per capita GNP of only $450 per year, one-tenth that of the rich 25 percent. Moreover, the gap between the rich and the poor is growing, and will probably continue to grow.

In 1960 the poor countries of the world had an average per capita income of $120, compared to $1,360 for the rich countries, making a difference of $1,240. By 1974 the poor had increased their income average to $360, the rich to $4,410, making a difference of $4,050 (See chart above).

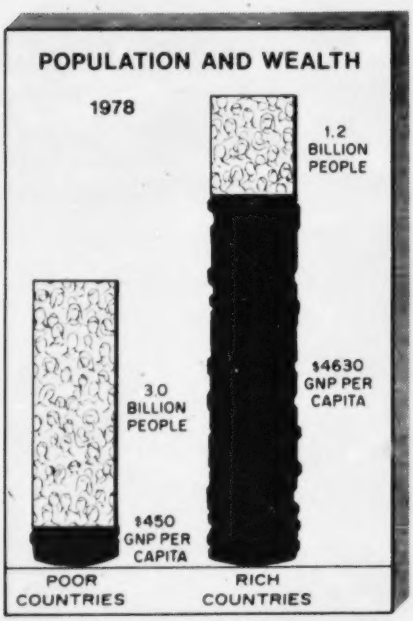
The income gap between the rich and the poor, then, increased by more than 300 percent in 14 years. And given the rate of population growth in the poor countries, which not only divides the economic pie into increasingly smaller pieces but also inhibits the rate of economic development, this gap could increase by an even greater percentage in the next 14 years.

THE IRONY OF PROGRESS

One of the ironies of social and economic progress in the poor countries is that population growth may accelerate or at least remain steady in the short term because of reduced infant mortality rates. In the long term, however, these reduced rates should convince parents to have fewer children. The fewer children who die, the fewer children parents must have to achieve their ideal family size.

Indeed, the root cause of rapid population growth throughout the world has been the rapid decline in death rates, not an increase in birth rates. This decline continues today, but unlike earlier decades there seems to be the beginning of a reciprocal decline in birth rates, at least in some countries.

(continued on p. 3)



Source: Population Reference Bureau and United Nations

Poppings

Congress Deliberates Special Funds for Pop Ed

As INTERCHANGE went to press Congress was considering legislation which would authorize roughly $7 million for the development of population education programs in elementary and secondary schools.

The legislation takes the form of an amendment to the Elementary and Secondary Education Act (ESEA), now being considered by the House Education and Labor Committee, chaired by Carl Perkins (D-KY).

The amendment is being submitted by Congressman John N. Erlenborn (R-IL), who is also a member of the Select Committee on Population. It calls for distribution of the funds in the form of grants and contracts for teacher training, curriculum development, and materials distribution. The proposal will be attached to the Special Projects section (Title VI) of the ESEA.

Supporters of the amendment are optimistic that it will pass both the Education and Labor Committee and the full House. The measure is expected to receive strong endorsement from four members of the Education and Labor Committee who also serve on the Select Committee on Population, which voted unanimous support for the proposal.

If the amendment is passed by the Education and Labor Committee, it will mark the first occasion that a House committee has voted funds exclusively for population education.

In 1976 the House Subcommittee on the Census, chaired by Patricia Schroeder (D-CO), held hearings on the need for population education funding. However, no specific legislative proposals came out of those hearings.

Subsequently, Congressman James H. Scheuer (D-NY) drafted his own legislation on population education, but his proposals have not yet been introduced into the legislative process.

The multi-billion dollar ESEA is a major piece of legislation which came into being as part of the "Great Society" programs of the Johnson administration. It has remained the principal vehicle for funneling federal funds into school programs ever since.

In general, the program has four objectives: (1) enrichment in the social sciences, including in-depth studies; (2) research, in which all students will participate in a sociological survey and conduct computer analysis; (3) exposure to a professional environment; and (4) a focus on rural America and its problems, using the Canton area as a laboratory.

Requirements for participation include: high academic standing, completion of junior year in high school, and U.S. citizenship.

To apply, a student must be nominated by a high school teacher or other school official, and must submit a completed application form, a current transcript, any national test score (such as PSAT or SAT), a brief essay, and a list of books and periodicals recently read.

Interested students should write for application forms as soon as possible to: Dr. Parker G. Marden, Dept. of Sociology, St. Lawrence U., Canton, NY 13617.

Bulletin! *On April 5 the House Education and Labor Committee unanimously passed the Erlenborn population education amendment to the Elementary and Secondary Education Act (ESEA). Subsequently the entire bill was approved by the Committee. It will now be considered by both the full House and the Senate. After any differences in the House and Senate versions are resolved, both bodies will vote on the legislation. It must then be signed into law by President Carter.*

INTERCHANGE's sources are optimistic and predict passage of the bill. The process should take about two months.

St. Lawrence Offers Summer Pop Program For Secondary Students

A summer program in population studies and sociology is being offered to high school students by St. Lawrence University in Canton, N.Y. There are 44 openings in the program.

Organized by Professor Parker G. Marden, and supported by the National Science Foundation, the program will run from July 2 to August 4.

The cost to participants is $350, which includes room, board, books, and fees. There is no tuition charge, and scholarships are available on the basis of need.

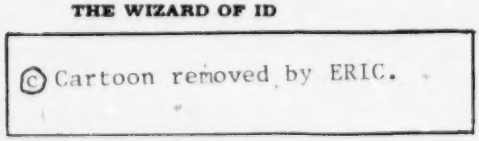
The purpose of the program, according to its brochure, is to bring ". . . high-ability secondary students together to study changes in the populations of the United States and various other nations, the factors that cause them, and the consequences that they hold for all of us."

(continued from p. 2)

Whether this decline signals a permanent transition from high to low fertility rates—and whether the transition can take place fast enough to improve the lot of those already living—only time will tell.

As for the distribution of the world's wealth, only the policies of the wealthy 25 percent can make any lasting or significant difference.

THE WIZARD OF ID **by Brant parker and Johnny hart**



THE WIZARD OF ID by permission of Johnny Hart and Field Enterprises, Inc.

Eight Year Old Gives Lesson, Cracks First PRB Pop Puzzle

The winner of last issue's Pop Puzzle—the first ever conducted by *Interchange*—was 8-year-old Lee Imrey of Champaign, IL. The puzzle read: "Why is it that the longer you live, the longer you can expect to live?

Lee's answer was contained in the following letter from his mother:

"Dear Sirs:

I was glancing through the January, 1978 issue of *Interchange* this morning at the breakfast table, when my son, Lee—who was 8 years old last week—spotted the "Pop Puzzle" headline on the back. Being an inveterate puzzle-solver, he borrowed the newsletter, considered it a few minutes, then said: 'When you are younger, you can catch more diseases and sicknesses than when you are older. Also, if you are young you could have something that was not formed in your body, and when you are older you have lots more experience at fighting germs and making it so that you do not get sick.'

". . . I am fairly sure from subsequent questioning that what he said is that infant mortality is a significant component of life expectancy at birth which is not reflected in life expectancy at later years; that the estimated life expectancy of a cohort aged x to x+5 is not reduced by the mortality experience of cohorts aged 0 to x and is therefore higher at each age interval."

In other words, life expectancy at birth (the standard life expectancy measure) takes into account the chances of mortality *at all ages*. However, life expectancy calculated for an individual takes into account only the mortality of people the same age or older than the individual. The older a person becomes, the more chances of dying that person has bypassed, thereby increasing that person's life expectancy. An American child at birth can expect to live to 72, but a 70-year-old American can expect to live to 76 on the average.

Harriet Imrey is project demographer for the Population Dynamics Group, University of Illinois, and her husband is a biostatistician who teaches medical students and epidemiologists. However, Dr. Imrey assures us that she and her husband "are not in the habit of discussing life tables around the house." Lee solved the puzzle on his own, in his own 8-year-old fashion.

To paraphrase Jerome Bruner, former Harvard psychologist and educator, almost anything can be discovered by a student of any age. In fact, Dr. Imrey concludes her letter by saying, "I think that I will give serious consideration to revising some of the teaching modules which I have prepared for college and graduate students in order to present them to local third-graders. It appears that no one is too young to learn."

Pop Puzzle

The first person to solve the following puzzle will receive a special "mystery" prize. The name of the winner, along with the correct answer, will appear in the next issue of *Interchange*.

Puzzle: why is it that Mexico, although it has an infant mortality rate four times that of the United States, still has an overall death rate lower than the U.S. (8 per 1,000 vs. 9 per 1,000)?

SPE Resets Meeting

The dates for the meeting of the Society of Population Educators (SPE) have been changed to May 4 and 5. The original dates, April 13 and 14, were found to conflict with the annual meeting of the Population Association of America.

The location (Washington, D.C.) remains unchanged. The meeting will begin at 1:15 pm, May 4, in room 715-B of the Hubert H. Humphrey Building, 200 Independence Avenue, S.W., Washington, D.C. The program will conclude at 3:00 pm May 5.

The afternoon program May 4 includes a "share and tell" session and a business meeting. After a dinner break, the program will shift to room 503-A and will feature a presentation on practical classroom activities and materials. Those who would like to contribute should contact either Elaine Murphy (Zero Population Growth, 1346 Connecticut Avenue, N.W., Washington, D.C. 20036) or Leon Clark (Population Reference Bureau, 1337 Connecticut Avenue, N.W., Washington, D.C. 20036).

The morning program on the 5th will take place in room 425-A and will be devoted to discussion of the ISCOMPE report as well as the role of the World Bank in population education. In addition, the group will be addressed by a Congressional staff member on federal legislation affecting population education.

After a lunch break, Sloan Wayland of Teachers College, Columbia University, will lead a discussion on research and new developments in the field.

For more information, contact William Griffith, 5760 Toronto Road, University of British Columbia, Vancouver, B.C., Canada V6T 1L2.

PRB Memberships

If you find INTERCHANGE interesting and useful, you would probably enjoy receiving other Population Reference Bureau (PRB) publications:

- INTERCOM—the monthly population news magazine;
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PRB Educator Members receive all the above publications, between 25 and 30 pieces a year, for only a fraction of the regular membership fee.

High school teachers (and all students) pay only $5 a year; college teachers pay just $10. The regular annual membership is $20.

To join, simply send your name, address (and school affiliation if different from address), and check to: Population Reference Bureau, P.O. Box 35012, Washington, D.C. 20013.

We look forward to having you as an Educator Member!

Are you interested in rounding out your INTERCHANGE collection? Back issues of INTERCHANGE and the TEACHING MODULE are available for $1.00 each. Two or more copies are 50¢ each.

Titles include:

- "The Cost and Value of American Children," September 1977
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- "Marriage, Divorce and Living Together," January 1978

To order, simply send a check to the address above.

Interchange is . . .

a publication of the Population Reference Bureau, Inc., written by Leon E. Clark, with the assistance of Andrew J. Leighton and Helen T. Lambert, and published quarterly during the academic year. It is distributed free on request to educators and centers of population education activity. The purpose of the newsletter is to further the goal of infusing population materials into U.S. schools by: (1) presenting information on population-related issues; (2) distributing classroom materials; and (3) reviewing developments in the field of population education. Interchange depends upon an exchange of information and ideas and thus openly solicits correspondence from its readers.

The Population Reference Bureau, Inc., 1337 Connecticut Ave., N.W., Washington, D.C. 20036, is a non-profit education organization established in 1929. The Bureau is a source of information on the facts and implications of national and world population trends. Educator memberships are $5 a year for school teachers and all students and $10 a year for college instructors. Members receive Interchange, Population Bulletins, *the annual* World Population Data Sheet, PRB Reports, *and* Intercom.

100 Percent Recycled Paper

1977 World Population Data Sheet of the Population Reference Bureau, Inc.

1337 Connecticut Avenue N.W.
Washington, D. C. 20036
(202) 785-4664

Prepared by Paul F. Myers, Former Chief, Foreign Demographic Analysis Division, U. S. Department of Commerce, assisted by Thomas T. Kane, Population Reference Bureau.

Except as noted, this Data Sheet is based primarily on the published materials of the United Nations cited in Sources of data. The Population Reference Bureau assumes all responsibility for the accuracy of the figures shown.

The Population Reference Bureau gathers, interprets, and publishes information on the facts and implications of national and world population trends. Founded in 1929, it is a private, nonprofit educational organization that is supported by foundation grants, individual and corporate contributions, and memberships. It consults with other groups in the United States and abroad and operates information and library services.

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Region or Country[1]	Population Estimate Mid-1977 (millions)[2]	Birth Rate[3]	Death Rate[3]	Rate of Natural Increase (annual, percent)[4]	Number of Years to Double Population[5]	Population Projection to 2000 (millions)[6]	Infant Mortality Rate[7]	Population under 15 Years (percent)[8]	Population over 64 Years (percent)[8]	Life Expectancy at Birth (years)	Urban Population (percent)[9]	Per Capita Gross National Product (US$)[10]
WORLD	**4,083**	**30**	**12**	**1.8**	**38**	**6,182**	**103**	**36**	**6**	**59**	**38**	**1,530**
AFRICA	**423**	**45**	**19**	**2.6**	**27**	**811**	**154**	**44**	**3**	**46**	**24**	**400**
NORTHERN AFRICA	**100**	**42**	**14**	**2.8**	**25**	**185**	**130**	**44**	**3**	**53**	**39**	**570**
Algeria	17.8	48	15	3.2	22	36.5	142	48	3	53	52	780
Egypt	38.9	36	12	2.3	30	63.9	116	41	3	52	45	310
Libya	2.7	48	9	3.9	18	5.2	130	49	4	55	30	5,080
Morocco	18.3	48	16	3.2	22	35.5	130	46	2	53	38	470
Sudan	16.3	48	18	3.0	23	32.7	141	45	3	51	13	290
Tunisia	6.0	34	11	2.3	30	10.8	125	45	4	55	47	760
WESTERN AFRICA	**125**	**49**	**23**	**2.6**	**27**	**243**	**175**	**45**	**3**	**42**	**19**	**300**
Benin (Dahomey)	3.3	50	23	2.7	26	6.0	185	46	4	41	14	140
Cape Verde	0.3	29	9	2.0	35	0.4	79	48	5	50	8	470
Gambia	0.6	42	21	2.1	33	0.9	165	41	2	44	14	190
Ghana	10.4	47	20	2.7	26	21.1	156	47	4	48	31	460
Guinea	4.7	47	23	2.4	29	8.5	175	43	3	41	20	130
Guinea-Bissau	0.5	40	25	1.5	46	0.8	208	37	4	38	23	390
Ivory Coast	7.0	46	21	2.5	28	13.2	164	43	3	44	20	500
Liberia	1.7	50	21	2.9	24	3.0	159	42	3	45	28	410
Mali	5.9	50	26	2.4	29	11.0	188	49	2	38	13	90
Mauritania	1.4	45	25	2.0	35	2.4	187	42	6	38	23	310
Niger	4.9	52	26	2.7	26	9.6	200	43	3	38	9	130
Nigeria	66.6	49	23	2.7	26	134.9	180	45	2	41	18	310
Senegal	5.3	46	21	2.5	28	9.3	159	43	3	44	32	370
Sierra Leone	3.2	45	21	2.4	29	5.8	136	43	3	44	15	200
Togo	2.3	51	23	2.7	26	4.6	127	46	3	41	15	270
Upper Volta	6.4	48	26	2.3	30	11.0	182	43	3	38	4	90
EASTERN AFRICA	**120**	**46**	**19**	**2.7**	**26**	**239**	**151**	**44**	**3**	**45**	**12**	**220**
Burundi	3.9	41	20	2.1	33	7.2	150	44	2	40	2	100
Comoros	0.3	45	20	2.5	28	0.5	160	43	3	46	10	260
Ethiopia	29.4	43	18	2.5	28	53.8	181	44	3	42	12	100
Kenya	14.4	49	16	3.3	21	31.5	119	46	3	50	10	220
Madagascar	7.9	50	21	2.9	24	16.4	102	35	3	44	14	200
Malawi	5.3	48	24	2.4	29	9.9	142	35	3	43	10	150
Mauritius	0.9	25	8	1.7	41	1.2	46	41	4	63	44	580
Mozambique	9.5	43	20	2.3	30	17.4	165	43	3	44	6	310
Reunion	0.5	28	7	2.1	33	0.7	47	43	4	63	51	1,550
Rhodesia	6.8	48	14	3.4	20	15.2	122	48	2	52	20	540
Rwanda	4.5	51	22	2.9	24	8.7	133	44	3	41	3	90
Seychelles	0.1	33	9	2.4	29	0.1	39	43	6	65	26	520
Somalia	3.4	47	22	2.6	27	6.5	177	45	2	41	28	100
Tanzania, United Rep. of	16.0	47	22	2.5	28	33.1	162	47	2	44	7	170
Uganda	12.4	43	16	2.7	26	24.7	160	44	3	50	7	250
Zambia	5.2	50	19	3.1	22	11.3	160	46	3	46	36	540

MIDDLE AFRICA	**48**	**44**	**22**	**2.3**	**30**	**88**	**165**	**43**	**3**	**42**	**24**	**270**
Angola	6.3	47	24	2.3	30	11.7	203	42	3	38	18	680
Cameroon, United Rep. of	6.7	40	22	1.8	38	11.6	137	40	3	41	20	270
Central African Republic	1.9	43	22	2.1	33	3.3	190	42	3	41	36	230
Chad	4.2	44	24	2.0	35	6.9	160	40	3	38	14	120
Congo, People's Rep. of	1.4	45	21	2.4	29	2.7	180	42	3	44	40	500
Equatorial Guinea	0.3	37	20	1.7	41	0.5	165	37	3	44	45	320
Gabon	0.5	32	22	1.0	69	0.7	178	32	4	41	32	2,240
Sao Tome and Principe	0.1	45	11	3.4	20	0.1	64	—	—	53	16	570
Zaire	26.3	45	20	2.5	28	50.5	160	44	3	44	26	150
SOUTHERN AFRICA	**30**	**40**	**16**	**2.5**	**28**	**57**	**119**	**41**	**4**	**51**	**44**	**1,220**
Botswana	0.7	46	23	2.3	30	1.4	97	48	6	56	12	330
Lesotho	1.1	39	20	1.9	36	1.8	114	40	4	46	3	180
Namibia	0.9	44	23	2.1	33	1.7	177	41	4	41	32	800
South Africa	26.1	40	15	2.5	28	51.2	117	41	4	52	48	1,320
Swaziland	0.5	49	22	2.7	26	1.0	149	48	3	44	8	470
ASIA	**2,325**	**32**	**12**	**2.0**	**35**	**3,584**	**116**	**38**	**4**	**56**	**26**	**530**
SOUTHWEST ASIA	**89**	**42**	**14**	**2.8**	**25**	**166**	**114**	**44**	**4**	**55**	**44**	**1,370**
Bahrain	0.3	43	8	3.5	20	0.6	78	44	3	63	78	2,440
Cyprus	0.6	17	9	0.8	87	0.8	29	29	9	71	42	1,180
Gaza	0.4	49	16	3.3	21	0.9	—	53	5	52	87	—
Iraq	11.8	44	11	3.2	22	24.3	99	48	3	53	64	1,280
Israel	3.6	28	7	2.1	33	5.5	22	33	7	72	82	3,580
Jordan	2.9	48	15	3.3	21	5.9	97	48	3	53	42	460
Kuwait	1.1	44	5	3.9	18	2.9	44	44	2	69	56	11,510
Lebanon	2.8	40	10	3.0	23	5.6	59	41	5	64	60	1,070
Oman	0.8	50	19	3.1	22	1.6	138	—	—	—	5	2,070
Qatar	0.1	50	19	3.1	22	0.2	138	—	—	—	69	8,320
Saudi Arabia	7.6	50	20	2.9	24	14.8	152	45	3	45	21	3,010
Syria	7.8	45	15	3.0	23	16.0	93	49	4	57	46	660
Turkey	41.9	39	12	2.7	26	72.4	119	42	4	57	43	860
United Arab Emirates	0.2	50	18	3.2	22	0.5	138	—	—	—	52	10,480
Yemen	5.6	50	21	2.9	24	11.0	152	45	3	45	9	210
Yemen, Democratic	1.8	50	21	2.9	24	3.5	152	48	4	45	33	240
MIDDLE SOUTH ASIA	**864**	**37**	**14**	**2.3**	**30**	**1,473**	**125**	**41**	**3**	**49**	**20**	**200**
Afghanistan	20.0	43	21	2.2	32	36.1	182	44	3	40	15	130
Bangladesh	83.3	47	20	2.7	26	154.9	132	43	3	47	9	110
Bhutan	1.2	44	20	2.3	30	2.1	—	42	3	44	3	70
India	622.7	34	13	2.1	33	1,023.7	122	40	3	50	21	150
Iran	34.8	44	16	2.8	25	66.1	139	47	3	51	44	1,440
Maldives	0.1	50	23	2.7	26	0.2	—	44	2	—	11	100
Nepal	13.2	43	20	2.3	30	23.2	169	40	3	44	4	110
Pakistan	74.5	44	15	2.9	24	145.5	121	46	3	51	26	140
Sri Lanka	14.1	28	8	2.0	35	20.7	45	39	4	68	22	150
SOUTHEAST ASIA	**332**	**38**	**14**	**2.4**	**29**	**574**	**116**	**43**	**3**	**52**	**21**	**260**
Burma	31.8	40	16	2.4	29	53.3	126	40	4	50	22	110
Democratic Kampuchea (Cambodia)	8.0	47	19	2.8	25	14.7	127	45	3	45	12	70
East Timor	0.7	44	23	2.1	33	1.2	184	42	3	40	11	150
Indonesia	136.9	38	14	2.4	29	226.9	137	44	2	48	18	180
Lao People's Republic (Laos)	3.5	45	23	2.2	32	5.8	123	42	3	40	15	70
Malaysia	12.6	35	7	2.8	25	21.6	75	45	3	63	27	720
Philippines	44.3	35	8	2.7	26	83.7	74	43	3	58	32	370
Singapore	2.3	18	5	1.3	53	3.1	14	34	4	68	100	2,510
Thailand	44.4	35	11	2.4	29	84.6	89	45	3	58	13	350
Vietnam, Socialist Rep. of	47.3	42	20	2.1	33	78.9	—	41	4	50	22	160

Region or Country[1]	Population Estimate Mid-1977 (millions)[2]	Birth Rate[3]	Death Rate[3]	Rate of Natural Increase (annual, percent)[4]	Number of Years to Double Population[5]	Population Projection to 2000 (millions)[6]	Infant Mortality Rate[7]	Population under 15 Years (percent)[8]	Population over 64 Years (percent)[8]	Life Expectancy at Birth (years)	Urban Population (percent)[9]	Per Capita Gross National Product (US$)[10]
EAST ASIA	**1,040**	**26**	**10**	**1.6**	**43**	**1,371**	**22**	**33**	**6**	**63**	**31**	**820**
China, People's Rep. of[11]	850	27	10	1.7	41	1,126	—	33	6	62	24	350
Hong Kong	4.5	20	5	1.4	50	5.9	17	31	5	71	92	1,720
Japan	114.2	17	6	1.1	63	133.4	10	24	8	74	72	4,460
Korea, Dem. People's Rep. of	16.7	36	9	2.6	27	27.5	—	42	4	61	43	430
Korea, Rep. of	35.9	24	7	1.7	41	52.9	47	40	3	65	48	550
Macao	0.3	25	7	1.8	38	0.4	78	38	5	—	97	310
Mongolia	1.5	40	10	3.0	23	2.7	—	44	3	61	46	700
Taiwan (Rep. of China)[12]	16.6	23	5	1.8	38	22.0	26	43	3	69	63	890
NORTH AMERICA	**240**	**15**	**9**	**0.6**	**116**	**294**	**16**	**26**	**10**	**72**	**74**	**7,020**
Canada	23.5	16	7	0.8	87	31.6	15	27	8	73	76	6,650
United States	216.7	15	9	0.6	116	262.5	16	26	10	72	74	7,060
LATIN AMERICA	**336**	**36**	**9**	**2.7**	**26**	**608**	**78**	**42**	**4**	**62**	**59**	**1,030**
MIDDLE AMERICA	**85**	**42**	**8**	**3.4**	**20**	**174**	**70**	**46**	**3**	**62**	**56**	**1,060**
Costa Rica	2.1	29	5	2.4	29	3.6	38	44	4	68	41	910
El Salvador	4.3	40	8	3.2	22	8.6	58	46	3	58	39	450
Guatemala	6.4	43	12	3.1	22	12.2	80	45	3	53	34	650
Honduras	3.3	49	15	3.5	20	6.9	117	47	2	54	31	350
Mexico	64.4	42	7	3.5	20	134.6	66	46	3	63	62	1,190
Nicaragua	2.3	48	14	3.4	20	4.8	123	48	3	53	49	720
Panama	1.8	31	5	2.6	27	3.2	40	43	4	66	50	1,060
CARIBBEAN	**28**	**30**	**9**	**2.1**	**33**	**44**	**75**	**41**	**5**	**64**	**45**	**970**
Bahamas	0.2	20	5	1.4	50	0.3	35	44	3	66	58	2,600
Barbados	0.2	19	8	1.1	63	0.3	38	34	9	69	44	1,260
Cuba	9.6	22	6	1.6	43	14.9	29	37	6	70	60	800
Dominican Republic	5.0	46	11	3.5	20	10.7	98	48	3	58	44	720
Grenada	0.1	26	8	1.9	36	0.1	32	—	—	63	15	370
Guadeloupe	0.3	28	7	2.1	33	0.5	44	40	5	60	48	1,240
Haiti	5.3	36	16	2.0	35	7.9	150	42	4	50	20	180
Jamaica	2.1	30	7	2.3	30	2.8	26	46	6	68	37	1,290
Martinique	0.4	22	7	1.6	43	0.5	32	41	5	65	50	1,540
Netherlands Antilles	0.2	20	5	1.5	46	0.4	28	38	5	62	48	1,590
Puerto Rico	3.2	23	6	1.7	41	4.1	24	37	7	72	58	2,300
Trinidad and Tobago	1.0	24	6	1.8	38	1.3	34	40	4	66	12	1,900
TROPICAL SOUTH AMERICA	**183**	**37**	**9**	**2.8**	**25**	**337**	**84**	**43**	**3**	**61**	**59**	**960**
Bolivia	4.8	44	18	2.6	27	8.7	108	42	4	47	34	320
Brazil	112.0	37	9	2.8	25	205.0	82	42	3	61	59	1,010
Colombia	25.2	33	9	2.5	28	47.1	97	43	3	61	64	550
Ecuador	7.5	42	10	3.2	22	14.7	78	45	4	60	41	550
Guyana	0.8	32	7	2.4	29	1.3	40	44	3	68	40	560
Paraguay	2.8	40	9	3.1	22	5.3	65	45	4	62	37	570
Peru	16.6	41	12	2.9	24	31.2	110	45	3	56	55	810
Surinam	0.4	37	7	3.0	23	0.9	30	50	4	66	50	1,180
Venezuela	12.7	37	6	3.1	22	23.2	49	45	3	65	74	2,220

TEMPERATE SOUTH AMERICA	**40**	**23**	**9**	**1.4**	**50**	**52**	**63**	**31**	**7**	**67**	**79**	**1,340**
Argentina	26.1	23	9	1.3	53	32.9	59	29	8	68	80	1,590
Chile	11.0	24	8	1.6	43	15.8	77	36	5	63	76	760
Uruguay	2.8	21	10	1.1	63	3.4	45	28	9	70	81	1,330
EUROPE	**478**	**15**	**10**	**0.4**	**173**	**539**	**22**	**24**	**12**	**71**	**65**	**4,090**
NORTHERN EUROPE	**82**	**13**	**11**	**0.2**	**347**	**90**	**14**	**24**	**13**	**72**	**74**	**4,590**
Denmark	5.1	14	10	0.4	173	5.4	12	23	13	74	80	6,920
Finland	4.8	14	9	0.5	139	4.8	10	23	10	71	58	5,100
Iceland	0.2	21	7	1.4	50	0.3	11	30	9	74	86	5,620
Ireland	3.2	22	11	1.1	63	4.0	17	31	11	71	52	2,420
Norway	4.0	14	10	0.4	173	4.5	11	24	14	74	45	6,540
Sweden	8.2	13	11	0.2	347	9.2	8	21	15	75	81	7,880
United Kingdom	56.0	12	12	0.1	693	61.9	16	24	14	72	78	3,840
WESTERN EUROPE	**152**	**12**	**11**	**0.1**	**693**	**169**	**15**	**23**	**13**	**71**	**77**	**6,150**
Austria	7.5	12	13	0.0	–	8.1	21	24	15	71	52	4,720
Belgium	9.9	12	12	0.0	–	10.7	16	23	14	71	87	6,070
France	53.4	14	11	0.4	173	61.7	12	24	14	72	70	5,760
Germany, Federal Rep. of	61.2	10	12	−0.2	–	65.5	20	22	14	71	88	6,610
Luxembourg	0.4	11	12	−0.1	–	0.4	15	20	13	70	69	6,050
Netherlands	13.9	13	8	0.5	139	16.1	11	26	11	74	77	5,590
Switzerland	6.2	12	9	0.4	173	6.9	12	23	12	73	55	8,050
EASTERN EUROPE	**108**	**18**	**11**	**0.7**	**99**	**122**	**26**	**23**	**11**	**70**	**57**	**2,800**
Bulgaria	8.8	17	10	0.6	116	9.9	23	22	11	71	59	2,040
Czechoslovakia	15.0	20	12	0.8	87	16.9	21	23	12	71	67	3,710
German Democratic Republic	16.7	11	14	−0.4	–	17.7	16	22	16	71	75	4,230
Hungary	10.7	18	12	0.6	116	11.1	33	20	12	70	50	2,480
Poland	34.7	19	9	1.0	69	40.2	25	24	9	70	54	2,910
Romania	21.7	20	9	1.1	63	25.9	35	25	9	69	43	1,300
SOUTHERN EUROPE	**136**	**17**	**9**	**0.8**	**87**	**158**	**26**	**26**	**10**	**71**	**52**	**2,470**
Albania	2.5	33	8	2.5	28	4.1	87	40	5	67	34	600
Greece	9.1	16	9	0.7	99	9.8	24	24	12	72	65	2,360
Italy	56.5	15	10	0.5	139	61.9	21	24	12	72	53	2,940
Malta	0.3	19	10	0.9	77	0.3	19	26	9	70	94	1,220
Portugal	9.2	20	11	0.9	77	10.4	38	27	10	69	26	1,610
Spain	36.5	18	8	1.0	69	45.4	14	28	10	72	61	2,700
Yugoslavia	21.8	18	9	1.0	69	25.7	40	26	8	68	39	1,480
USSR	**259**	**18**	**9**	**0.9**	**77**	**314**	**28**	**26**	**9**	**69**	**60**	**2,620**
OCEANIA	**22**	**22**	**9**	**1.3**	**53**	**32**	**55**	**32**	**7**	**67**	**71**	**4,490**
Australia	13.9	17	8	0.9	77	19.6	16	28	8	71	86	5,640
Fiji	0.6	29	7	2.2	32	0.8	21	40	3	70	38	920
New Zealand	3.2	18	8	1.0	69	4.4	16	30	9	72	81	4,680
Papua New Guinea	2.9	41	17	2.4	29	5.1	159	45	2	48	11	450
Samoa, Western	0.2	35	7	2.8	25	0.3	40	51	3	63	21	320
Solomon Islands	0.2	36	9	2.7	26	0.4	52	44	3	–	9	310

General Notes

World Population Data Sheets of various years should not be used as a time series. Because every attempt is made to use the most recent and most accurate information, data sources vary and radical changes in numbers and rates from year to year may reflect improved source material, revised data, or a later base year for computation, rather than yearly changes.

Sources of data: Aside from the population estimates and projections (see footnotes 2 and 6), number of years to double population (see footnote 5), and per capita Gross National Product (see footnote 10), almost all of the data in this table were reported in the following United Nations (UN) publications: *Demographic Yearbook*, 1973, 1974, and 1975 editions; *Population and Vital Statistics Report, Data Available as of 1 January 1977*, Statistical Papers, Series A, Vol. XXIX, No. 1; *Trends and Prospects in Urban and Rural Population, 1950-2000, as Assessed in 1973-1974*, ESA/P/WP.54, 25 April 1975; *Selected World Demographic Indicators by Countries, 1950-2000*, ESA/P/WP.55, 28 May 1975; and *Single-Year Population Estimates and Projections for Major Areas, Regions and Countries of the World, 1950-2000*, ESA/P/WP.56, 6 October 1975. The source for any figure shown on the *Data Sheet* may be obtained by writing or telephoning the Population Reference Bureau.

Figures for the regions and the world: Population totals take into account small areas not listed on the *Data Sheet*. Totals may also not equal the sums of their parts because of independent rounding. All other data are weighted averages for countries for which data are available.

Dashes indicate data are unavailable.

Footnotes

[1]The *Data Sheet* lists all UN members and all geopolitical entities with a population larger than 200,000.

[2]Based on a population total from a very recent census or on the most recent official country or UN estimate; for almost all countries the estimate was for mid-1975. Each estimate was updated by the Population Reference Bureau to mid-1977 by applying the same rate of growth as indicated by population change during part or all of the period since 1970.

[3]Annual number of births or deaths per 1,000 population. For the more developed countries, with complete or nearly complete registration of births and deaths, nearly all the rates shown pertain to 1974 or 1975. For nearly all the developing countries, with incomplete registration, the rates refer to the 1970-75 period and are cited in Statistical Papers, Series A, as having been prepared by the United Nations. These rates were used in the medium variant estimates and projections as assessed by the United Nations in 1973 (UN, *Selected World Demographic Indicators* . . .). These figures should be considered as rough approximations only.

[4]Birth rate minus the death rate. Since the rates were based on unrounded birth and death rates, some rates do not exactly equal the difference between the birth and death rates shown because of rounding.

[5]Based on the rate of natural increase shown and assuming no change in the rate.

[6]Except for the United States, estimated by the Population Reference Bureau by applying the percentage increase in the population 1977-2000 implied by the UN medium variant projections to the population total as estimated for mid-1977. For the United States, the figure shown is the Series II projection given in the U.S. Bureau of the Census, *Projections of the Population of the United States: 1975 to 2050*, P-25, No. 601, October 1975.

[7]Annual number of deaths to infants under one year of age per 1,000 live births. For countries with complete or nearly complete registration of births and deaths, nearly all rates pertain to 1974 or 1975. For many developing countries with incomplete registration, rates are the latest available estimates generally obtained from the UN sources noted above; from World Health Organization, *World Health Statistics Report*, Vol. 29, No. 4, 1976; or from International Statistical Programs Center, U.S. Bureau of the Census, *World Population: 1973*, May 1974, and *World Population: 1975*, June 1976.

[8]The "dependency ratio" for each country or region can be derived by adding the percentages under 15 years and over 64 years and dividing by the complement. For the world as a whole, for example, 36% + 6% ÷ 58% gives a figure of 72 persons in the "dependent ages" for each 100 persons in the "working ages" of 15 to 65.

[9]The percentage of the total population living in areas defined as urban by each country.

[10]The figures given for the individual countries were released by the World Bank on December 27, 1976. They refer to 1975 except for 18 of the smaller countries for which the data refer to 1974. The figures are published in the eleventh edition of the *World Bank Atlas: Population, Per Capita Product, and Growth Rates*, 1977.

[11]In the absence of official information, the UN medium variant estimates as assessed in 1973 are given here for the birth and death rates. Some observers, however, consider the birth rate of 27 per 1,000 population too high at the present time because of China's rigorous family planning program. The population estimate for mid-1977 is also the medium variant estimate after subtracting the estimated mid-1977 total for Taiwan. However, population estimates for those provinces that have recently been announced through Chinese radio and newspapers strongly suggest that a more valid estimate would be 30 to 50 million higher than that given here. It is expected that the 1978 *Data Sheet* will show a revised estimate based on further information from China or new estimates by the UN.

[12]The UN does not show figures for Taiwan. These figures were separately estimated on the basis of official Taiwan data. The population was assumed to increase to 2000 at the same rate as that of the People's Republic of China.

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